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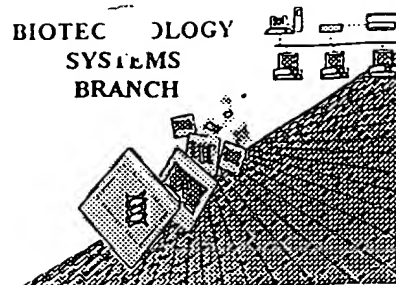
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## RAW SEQUENCE LISTING ERROR REPORT



0590  
10/05

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/892,864

Source: OIPF

Date Processed by STIC: 7/12/2000

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

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FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

### Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

OIPE

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/892,864

DATE: 07/12/2001

TIME: 09:44:33

Input Set : A:\209524US0CONT.txt

Output Set: N:\CRF3\07122001\I892864.raw

3 <110> APPLICANT: YOKOYAMA, Keiichi  
 4 ONO, Kunio  
 5 EJIMA, Daisuke  
 7 <120> TITLE OF INVENTION: PROCESS FOR PRODUCING TRANSGLUTAMINASE  
 9 <130> FILE REFERENCE: 209524US0CONT  
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/892,864  
 C--> 11 <141> CURRENT FILING DATE: 2001-06-28  
 11 <150> PRIOR APPLICATION NUMBER: PCT/JP99/07250  
 12 <151> PRIOR FILING DATE: 1999-12-24  
 14 <150> PRIOR APPLICATION NUMBER: JP 10-373131  
 15 <151> PRIOR FILING DATE: 1998-12-28  
 17 <160> NUMBER OF SEQ ID NOS: 58  
 19 <170> SOFTWARE: PatentIn version 3.1  
 21 <210> SEQ ID NO: 1  
 22 <211> LENGTH: 1519  
 23 <212> TYPE: DNA  
 24 <213> ORGANISM: Artificial Sequence  
 26 <220> FEATURE:  
 27 <223> OTHER INFORMATION: Synthetic DNA  
 29 <220> FEATURE:  
 30 <221> NAME/KEY: CDS  
 31 <222> LOCATION: (87)..(1082)  
 32 <223> OTHER INFORMATION:  
 35 <400> SEQUENCE: 1  
 36 ttcccctggt gacaattaat catcgaacta gttaactagt acgcaagttc acgtaaaaag 60  
 38 ggtatcgatt agtaaggagg tttaaa atg gat tct gac gat cgt gtt act cca 113  
 39 Met Asp Ser Asp Asp Arg Val Thr Pro  
 40 1 5  
 42 cca gct gaa cca ctg gat cgt atg cca gat cca tat cgt cca tct tat 161  
 43 Pro Ala Glu Pro Leu Asp Arg Met Pro Asp Pro Tyr Arg Pro Ser Tyr  
 44 10 15 20 25  
 46 ggt cgt gct gaa act gtt gtt aat aat tat att cgt aaa tgg caa caa 209  
 47 Gly Arg Ala Glu Thr Val Val Asn Asn Tyr Ile Arg Lys Trp Gln Gln  
 48 30 35 40  
 50 gtt tat tct cat cgt gat ggt cgt aaa caa caa atg act gaa gaa caa 257  
 51 Val Tyr Ser His Arg Asp Gly Arg Lys Gln Gln Met Thr Glu Glu Gln  
 52 45 50 55  
 54 cgt gaa tgg ctg tct tat ggt tgc gtt ggt gtt act tgg gtt aac tct 305  
 55 Arg Glu Trp Leu Ser Tyr Gly Cys Val Gly Val Thr Trp Val Asn Ser  
 56 60 65 70  
 58 ggt cag tat ccg act aac cgt ctg gca ttc gct tcc ttc gat gaa gat 353  
 59 Gly Gln Tyr Pro Thr Asn Arg Leu Ala Phe Ala Ser Phe Asp Glu Asp  
 60 75 80 85  
 62 cgt ttc aag aac gaa ctg aag aac ggt cgt ccg cgt tct ggt gaa act 401  
 63 Arg Phe Lys Asn Glu Leu Lys Asn Gly Arg Pro Arg Ser Gly Glu Thr  
 64 90 95 100 105  
 66 cgt gct gaa ttc gaa ggt cgt gtt gct aag gaa tcc ttc gat gaa gag 449

**Does Not Comply  
 Corrected Diskette Needed**

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/892,864

DATE: 07/12/2001

TIME: 09:44:33

Input Set : A:\209524US0CONT.txt

Output Set: N:\CRF3\07122001\I892864.raw

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67 Arg Ala Glu Phe Glu Gly Arg Val Ala Lys Glu Ser Phe Asp Glu Glu
68      110      115      120
70 aaa ggc ttc cag cgt gct cgt gaa gtt gct tct gtt atg aac cgt gct      497
71 Lys Gly Phe Gln Arg Ala Arg Glu Val Ala Ser Val Met Asn Arg Ala
72      125      130      135
74 cta gag aac gct cat gat gaa tct gct tac ctg gat aac ctg aag aag      545
75 Leu Glu Asn Ala His Asp Glu Ser Ala Tyr Leu Asp Asn Leu Lys Lys
76      140      145      150
78 gaa ctg gct aac ggt aac gat gct ctg cgt aac gaa gat gct cgt tct      593
79 Glu Leu Ala Asn Gly Asn Asp Ala Leu Arg Asn Glu Asp Ala Arg Ser
80      155      160      165
82 ccg ttc tac tct gct ctg cgt aac act ccg tcc ttc aaa gaa cgt aac      641
83 Pro Phe Tyr Ser Ala Leu Arg Asn Thr Pro Ser Phe Lys Glu Arg Asn
84 170      175      180      185
86 ggt ggt aac cat gat ccg tct cgt atg aaa gct gtt atc tac tct aaa      689
87 Gly Gly Asn His Asp Pro Ser Arg Met Lys Ala Val Ile Tyr Ser Lys
88      190      195      200
90 cat ttc tgg tct ggt cag gat aga tct tct tct gct gat aaa cgt aaa      737
91 His Phe Trp Ser Gly Gln Asp Arg Ser Ser Ser Ala Asp Lys Arg Lys
92      205      210      215
94 tac ggt gat ccg gat gca ttc cgt ccg gct ccg ggt act ggt ctg gta      785
95 Tyr Gly Asp Pro Asp Ala Phe Arg Pro Ala Pro Gly Thr Gly Leu Val
96      220      225      230
98 gac atg tct cgt gat cgt aac atc ccg cgt tct ccg act tct ccg ggt      833
99 Asp Met Ser Arg Asp Arg Asn Ile Pro Arg Ser Pro Thr Ser Pro Gly
100      235      240      245
102 gaa ggc ttc gtt aac ttc gat tac ggt tgg ttc ggt gct cag act gaa      881
103 Glu Gly Phe Val Asn Phe Asp Tyr Gly Trp Phe Gly Ala Gln Thr Glu
104 250      255      260      265
106 gct gat gct gat aag act gta tgg acc cat ggt aac cat tac cat gct      929
107 Ala Asp Ala Asp Lys Thr Val Trp Thr His Gly Asn His Tyr His Ala
108      270      275      280
110 ccg aac ggt tct ctg ggt gct atg cat gta tac gaa tct aaa ttc cgt      977
111 Pro Asn Gly Ser Leu Gly Ala Met His Val Tyr Glu Ser Lys Phe Arg
112      285      290      295
114 aac tgg tct gaa ggt tac tct gac ttc gat cgt ggt gct tac gtt atc      1025
115 Asn Trp Ser Glu Gly Tyr Ser Asp Phe Asp Arg Gly Ala Tyr Val Ile
116      300      305      310
118 acc ttc att ccg aaa tct tgg aac act gct ccg gac aaa gtt aaa cag      1073
119 Thr Phe Ile Pro Lys Ser Trp Asn Thr Ala Pro Asp Lys Val Lys Gln
120      315      320      325
122 ggt tgg ccg taatgaaagc ttg gatctct aattactgga cttcacacag      1122
123 Gly Trp Pro
124 330
126 actaaaatag acatatctta tattatgtga ttttgtgaca tttcctagat gtgaggtgga      1182
128 ggtgatgtat aaggtagatg atgacctct acgccggacg catcgtggcc ggcatcaccg      1242
130 gcgccacagg tgcggttgct ggccgctata tcgccgacat caccgatggg gaagatcggg      1302
132 ctgccactt cgggctcatg agcgcttggt tcggcggtgg tatggtggca ggccccgtgg      1362
134 ccgggggact gttgggcgcc atctccttgc atgcaccatt ccttgccggcg gcggtgctca      1422

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/892,864

DATE: 07/12/2001

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Input Set : A:\209524US0CONT.txt

Output Set: N:\CRF3\07122001\I892864.raw

136 acggcctcaa cctactactg ggctgcttc c taatgcagga gtcgcataag ggagagcgtc 1482  
 138 gagagcccg ctaatgagcg ggcttttttt tcagctg 1519  
 141 <210> SEQ ID NO: 2  
 142 <211> LENGTH: 332  
 143 <212> TYPE: PRT  
 144 <213> ORGANISM: Artificial Sequence  
 146 <220> FEATURE:  
 147 <223> OTHER INFORMATION: Synthetic DNA  
 149 <400> SEQUENCE: 2

151 Met Asp Ser Asp Asp Arg Val Thr Pro Pro Ala Glu Pro Leu Asp Arg  
 152 1 5 10 15  
 155 Met Pro Asp Pro Tyr Arg Pro Ser Tyr Gly Arg Ala Glu Thr Val Val  
 156 20 25 30  
 159 Asn Asn Tyr Ile Arg Lys Trp Gln Gln Val Tyr Ser His Arg Asp Gly  
 160 35 40 45  
 163 Arg Lys Gln Gln Met Thr Glu Glu Gln Arg Glu Trp Leu Ser Tyr Gly  
 164 50 55 60  
 167 Cys Val Gly Val Thr Trp Val Asn Ser Gly Gln Tyr Pro Thr Asn Arg  
 168 65 70 75 80  
 171 Leu Ala Phe Ala Ser Phe Asp Glu Asp Arg Phe Lys Asn Glu Leu Lys  
 172 85 90 95  
 175 Asn Gly Arg Pro Arg Ser Gly Glu Thr Arg Ala Glu Phe Glu Gly Arg  
 176 100 105 110  
 179 Val Ala Lys Glu Ser Phe Asp Glu Lys Gly Phe Gln Arg Ala Arg  
 180 115 120 125  
 183 Glu Val Ala Ser Val Met Asn Arg Ala Leu Glu Asn Ala His Asp Glu  
 184 130 135 140  
 187 Ser Ala Tyr Leu Asp Asn Leu Lys Lys Glu Leu Ala Asn Gly Asn Asp  
 188 145 150 155 160  
 191 Ala Leu Arg Asn Glu Asp Ala Arg Ser Pro Phe Tyr Ser Ala Leu Arg  
 192 165 170 175  
 195 Asn Thr Pro Ser Phe Lys Glu Arg Asn Gly Gly Asn His Asp Pro Ser  
 196 180 185 190  
 199 Arg Met Lys Ala Val Ile Tyr Ser Lys His Phe Trp Ser Gly Gln Asp  
 200 195 200 205  
 203 Arg Ser Ser Ser Ala Asp Lys Arg Lys Tyr Gly Asp Pro Asp Ala Phe  
 204 210 215 220  
 207 Arg Pro Ala Pro Gly Thr Gly Leu Val Asp Met Ser Arg Asp Arg Asn  
 208 225 230 235 240  
 211 Ile Pro Arg Ser Pro Thr Ser Pro Gly Glu Gly Phe Val Asn Phe Asp  
 212 245 250 255  
 215 Tyr Gly Trp Phe Gly Ala Gln Thr Glu Ala Asp Ala Asp Lys Thr Val  
 216 260 265 270  
 219 Trp Thr His Gly Asn His Tyr His Ala Pro Asn Gly Ser Leu Gly Ala  
 220 275 280 285  
 223 Met His Val Tyr Glu Ser Lys Phe Arg Asn Trp Ser Glu Gly Tyr Ser  
 224 290 295 300  
 227 Asp Phe Asp Arg Gly Ala Tyr Val Ile Thr Phe Ile Pro Lys Ser Trp  
 228 305 310 315 320

*this is not a DNA  
sequence.*

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/892,864

DATE: 07/12/2001

TIME: 09:44:33

Input Set : A:\209524US0CONT.txt

Output Set: N:\CRF3\07122001\I892864.raw

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231 Asn Thr Ala Pro Asp Lys Val Lys Gln Gly Trp Pro
232                               325           330
235 <210> SEQ ID NO: 3
236 <211> LENGTH: 39
237 <212> TYPE: DNA
238 <213> ORGANISM: Artificial Sequence
240 <220> FEATURE:
241 <223> OTHER INFORMATION: Synthetic DNA
243 <400> SEQUENCE: 3
244 aattcatcga ttagtaagga ggtttaaaat ggattctga           39
247 <210> SEQ ID NO: 4
248 <211> LENGTH: 41
249 <212> TYPE: DNA
250 <213> ORGANISM: Artificial Sequence
252 <220> FEATURE:
253 <223> OTHER INFORMATION: Synthetic DNA
255 <400> SEQUENCE: 4
256 cgatcgtcag aatccatttt aaacctcctt actaatcgat g           41
259 <210> SEQ ID NO: 5
260 <211> LENGTH: 41
261 <212> TYPE: DNA
262 <213> ORGANISM: Artificial Sequence
264 <220> FEATURE:
265 <223> OTHER INFORMATION: Synthetic DNA
267 <400> SEQUENCE: 5
268 cgatcgtggt actccaccag ctgaaccact ggatcgtatg c           41
271 <210> SEQ ID NO: 6
272 <211> LENGTH: 41
273 <212> TYPE: DNA
274 <213> ORGANISM: Artificial Sequence
276 <220> FEATURE:
277 <223> OTHER INFORMATION: Synthetic DNA
279 <400> SEQUENCE: 6
280 gatctggcat acgatccagt gggtcagctg gtggagtaac a           41
283 <210> SEQ ID NO: 7
284 <211> LENGTH: 41
285 <212> TYPE: DNA
286 <213> ORGANISM: Artificial Sequence
288 <220> FEATURE:
289 <223> OTHER INFORMATION: Synthetic DNA
291 <400> SEQUENCE: 7
292 cagatccata tcgtccatct tatggtcgtg ctgaaactgt t           41
295 <210> SEQ ID NO: 8
296 <211> LENGTH: 41
297 <212> TYPE: DNA
298 <213> ORGANISM: Artificial Sequence
300 <220> FEATURE:
301 <223> OTHER INFORMATION: Synthetic DNA
303 <400> SEQUENCE: 8

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/892,864

DATE: 07/12/2001

TIME: 09:44:33

Input Set : A:\209524US0CONT.txt

Output Set: N:\CRF3\07122001\I892864.raw

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304 attaacaaca gtttcagcac gaccataaga tggacgatat g 41
307 <210> SEQ ID NO: 9
308 <211> LENGTH: 41
309 <212> TYPE: DNA
310 <213> ORGANISM: Artificial Sequence
312 <220> FEATURE:
313 <223> OTHER INFORMATION: Synthetic DNA
315 <400> SEQUENCE: 9
316 gttaataatt atattcgtaa atggcaacaa gtttattctc a 41
319 <210> SEQ ID NO: 10
320 <211> LENGTH: 41
321 <212> TYPE: DNA
322 <213> ORGANISM: Artificial Sequence
324 <220> FEATURE:
325 <223> OTHER INFORMATION: Synthetic DNA
327 <400> SEQUENCE: 10
328 tcacgatgag aataaacttg ttgccattta cgaatataat t 41
331 <210> SEQ ID NO: 11
332 <211> LENGTH: 41
333 <212> TYPE: DNA
334 <213> ORGANISM: Artificial Sequence
336 <220> FEATURE:
337 <223> OTHER INFORMATION: Synthetic DNA
339 <400> SEQUENCE: 11
340 tcgtgatggt cgtaaacaac aaatgactga agaacaacgt g 41
343 <210> SEQ ID NO: 12
344 <211> LENGTH: 41
345 <212> TYPE: DNA
346 <213> ORGANISM: Artificial Sequence
348 <220> FEATURE:
349 <223> OTHER INFORMATION: Synthetic DNA
351 <400> SEQUENCE: 12
352 gccattcacg ttgttcttca gtcatttggt gtttacgacc a 41
355 <210> SEQ ID NO: 13
356 <211> LENGTH: 42
357 <212> TYPE: DNA
358 <213> ORGANISM: Artificial Sequence
360 <220> FEATURE:
361 <223> OTHER INFORMATION: Synthetic DNA
363 <400> SEQUENCE: 13
364 aatggctgtc ttatggttgc gttggtgtta cttgggttaa ca 42
367 <210> SEQ ID NO: 14
368 <211> LENGTH: 40
369 <212> TYPE: DNA
370 <213> ORGANISM: Artificial Sequence
372 <220> FEATURE:
373 <223> OTHER INFORMATION: Synthetic DNA
375 <400> SEQUENCE: 14
376 agcttggttaa cccaagtaac accaacgcaa ccataagaca 40

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/892,864

DATE: 07/12/2001

TIME: 09:44:34

Input Set : A:\209524US0CONT.txt

Output Set: N:\CRF3\07122001\I892864.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No  
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date